

4D  
1751  
A49

# ADJUSTMENTS FOR DEFENSE THE AGRICULTURAL • SITUATION •

NOVEMBER 1941

*A Brief Summary of Economic Conditions*

Issued Monthly by the Bureau of Agricultural Economics, United States Department of Agriculture  
Subscription price, 50 cents per year; single copy, 5 cents; foreign price, 70 cents; payable in cash or money  
order to the Superintendent of Documents, Government Printing Office, Washington, D. C.  
VOLUME 25 — NUMBER 11 — WASHINGTON, D. C.



## IN THIS ISSUE

	Page
Agricultural Adjustment for Defense.....S. E. Johnson and R. C. Tetto	2
Northern Dairy Region.....R. L. Mighell	4
The Corn Belt.....C. W. Crickman and B. R. Hurt	7
The West.....H. L. Stewart	12
The South.....K. L. Bachman	15
Credit Outlook for 1942.....	20
Egg Drying Industry Expands.....Nathan Koenig	22

## Food for Freedom

By CLAUDE R. WICKARD

*Secretary of Agriculture*

FOOD is a whole arsenal of weapons in this struggle for human freedom. It is the driving force behind high production by munitions workers, and top-notch performance and strong morale among soldiers and sailors. \* \* \* Our national self-interest and our humanitarian instincts challenge us to do this job of producing food and do it on a scale that will write history. \* \* \* In the day of victory when the nations sit down at the peace table our food stock piles, ready to be drawn on by the famished people of the Old World, will give great force to our views. For they will show once and for all that democracy builds for the needs of common men. \* \* \* By winning our American battle of farm production we will help to make it possible once again for men in all parts of the earth to live in comfort and in tolerance and in freedom.

## AGRICULTURAL ADJUSTMENT FOR DEFENSE

*FARMERS are preparing to produce in 1942 the biggest supply of foods in our history—of milk, eggs, meats, vegetables, and other foods. National production goals have been set up for this purpose, and suggestions have been made for State and county goals. The next step is to translate the needs for production in 1942 into practicable goals for individual farms. More than 6,000,000 farmers individually the country over are being asked this fall to set down their production plans for 1942.—Ed.*

THE National goal for milk in 1942 calls for a production of 125 billion pounds, and for eggs 4 billion dozen. Such figures are probably beyond human comprehension; it means considerably more to individual producers to say that an increase of 7 percent in production of milk is required in 1942, and an increase of 4 percent in production of eggs. Similarly as to meats, vegetables, and other foods for which increased production is sought for domestic consumption and export in 1942.

But for the individual farmer the question arises as to the adjustments he can make in contributing to the national goals in 1942. Wide variations exist in the production capacity of individual farms; probably still wider variations in the extent to which farmers are utilizing that capacity. Many farmers already have anticipated present needs and favorable prices; others are hampered by physical, economic or social conditions peculiar to individual farms, groups of farms, or entire areas or regions. Even where physical conditions do not prevent the increased production of needed foods, the unavailability or the high cost of materials and services needed in farm production may be limiting factors.

THIS 1942 production program is not merely a "sign-up" campaign. It is contemplated that in every case the individual farmer will have avail-

able the counsel of agricultural technicians informed as to local farm practices and conditions—counsellors capable of advising with farmers as to the adjustments which may be needed in contributing to the national production goals in 1942. Available to farmers also are the long-time adjustment recommendations based upon careful research and analysis by the Bureau of Agricultural Economics, as well as the records of agricultural action agencies cooperating in the agricultural planning programs.

The job of 1942 production will not even be well started until national goals are broken down into practicable jobs for every farmer in the country. Sign-ups must be reconsidered in terms of the best contribution to goals that can be made from the productive resources of each farm. Some farms cannot expand, and their share of the defense effort will be to hold production at present levels. Better situated farms must carry the load.

Paramount is the need for meeting the 1942 production goals without endangering the physical resources of any farm. The Nation cannot afford to have dissipated the agricultural conservation gains of the past 10 years—if for no other reason than that there is every likelihood that unusual production efforts will need to be continued in 1943. Moreover, the 1942 goals can be achieved without repetition of the disastrous exploitation of

NOV 22 '41

World War I, when land was indiscriminately plowed up.

**W**HAT the farmer may expect after 1942 is, of course, fundamental to the present defense effort. However, production goals achieved by properly distributing the job among individual farmers in the different type-of-farming areas will not result in the violent repercussions experienced following World War I. The goal approach when integrated with other Federal and State activities is flexible enough to meet any emergency, either of contraction or expansion.

**A**GRICULTURE has the producing plant and most of the information required for a carefully planned expansion of production. The need for careful planning is evident, if one checks the production goals for 1942 against the available area of cropland, or the expected increases in livestock production against the expected increases in feed and forage production. For the country as a whole, our feed-crops goal in 1942 falls short of meeting livestock needs by about 200 million bushels of corn. This quantity of grain is, of course, available in the ever-normal granary, but good management will be needed to get feed from surplus areas (largely in the Corn Belt) to the deficit areas in the Northeast, South, and West. More grain will be needed also to offset prospective shortages of hay in some regions. Some deficit areas will probably exceed their minimum feed production goals in 1942, thus easing the national feed load somewhat. But even with the best of weather and good organization, the job of making 1942 goals effective is a challenge to every farmer and farm leader.

In most farm areas there is land not now in crops—land which can be brought into production without endangering the soil resources. Remarkable increases in production can be made through greater efficiency in handling land, crops, and livestock.

In the South, greater diversification towards livestock has long been advocated, but little progress has been made in achieving it. In the dry-land areas there is continuing need for shifting from cash grain to livestock production. An old problem in the South is the need for the development of skills among farm people that will permit the expansion of dairy, poultry, and other industries, and relieve the congestion that now presses farms into more intensive cultivation than is good for either the soil or the people.

**A**N emergency phase of the current situation is the shortage of farm labor in some parts of the country. In many cases it appears that Federal action will be required if the labor needed for increased production is to be made available. In areas where large seasonal demands for labor can no longer be met, it may be necessary to organize community harvests or other community action. The Civilian Conservation Corps, the W. P. A., and perhaps even the Army camps furnish additional possibilities in acute situations. Higher prices and farm income in 1942 will also permit farmers to compete more effectively for labor by increasing farm wages.

Lack of experience in new farming enterprises, and insufficient equipment, materials, and available credit are among the major obstacles to adjustment for defense or post-defense situations by large numbers of farmers. The large commercial farmers have less difficulty in this regard; but it must be appreciated that approximately half the farmers of the United States are not in this category. These farmers need more than moral support if the adjustments and expansions required now and to meet post-war situations are to be made. The production program for 1942 and beyond may well be the rallying point for a vast job of agricultural adjustment that has long been needed.

SHERMAN E. JOHNSON  
ROBERT C. TETRO.

## Northern Dairy Region

**T**HE Northern Dairy Region is expected to make a major contribution toward the national food for freedom goals in 1942. Milk production must be expanded to an all-time high; other farm production within the region must also be increased or at least maintained.

No major alternatives such as cotton or wheat from which land, labor, and other resources may be withdrawn, are available to provide for the desired expansion in milk, eggs, meats, vegetables, and other foods. The Northern Dairy Region (and the Northeast particularly) has no great reserve of locally produced feed grains to be converted to milk and other livestock products. Yet, this region forms a large part of our base for increased production.

Dairy production is already at a high level and in many areas is pressing on the available roughage and pasture resources. The additional production in 1942 must, to a considerable extent, come from concentrates purchased from areas outside the region. Another major difficulty, particularly near actively expanding defense centers, is the growing shortage of farm labor. In some areas—in southern New England, for example—this situation is so acute as to interfere seriously with farm production plans.

The production goals that have been suggested for the States in the Northern Dairy Region are not likely to be attained through the adjustments that individual farmers can make alone. Much can be done by the individual farmer to increase his efficiency by adopting labor-saving methods, by improving his feeding and cropping practices, and by reducing unnecessary waste in many ways; but the best of individual effort must be supplemented by group and public action of various

sorts in order to reach the suggested goals.

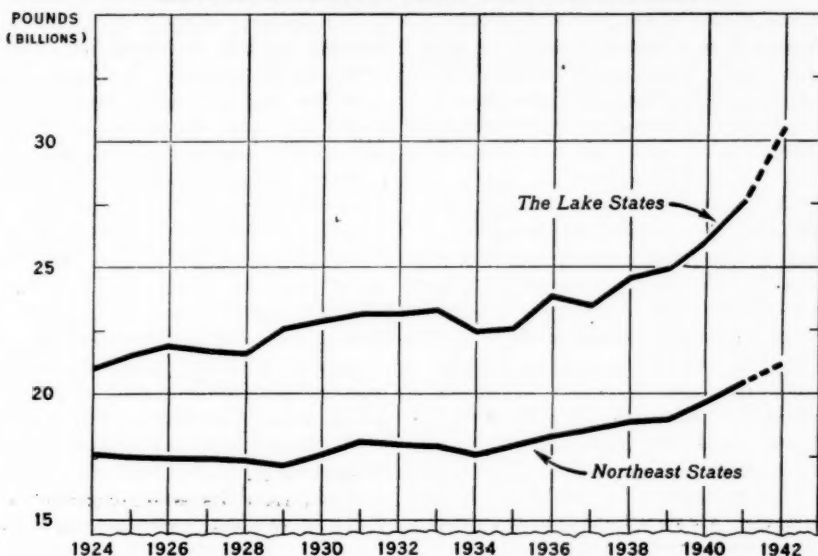
**W**ITHIN the boundaries of the large fluid-milk sheds, especially in the Northeast, there are adjustments which need to be worked out by farmers' marketing cooperatives and by Federal and State marketing authorities with special reference to defense needs. Base ratings, class prices, diversion differentials, and the like must be reexamined in the light of the new situation. Individual farmers cannot make the changes in their farming plans that will contribute most to the national defense effort if the system under which they market milk operates as an obstacle to the desired change.

In the Lake States many special area adjustments are now necessary, not only to meet the total milk goal but to get sufficient cheese, evaporated milk, and dry skim milk for which the war needs are especially great. Part of the adjustment involves a diversion of milk from butter-making creameries to cheese factories and evaporating plants. Many farmers who formerly delivered cream are now asked to deliver whole milk. This, of course, brings about a number of internal farm adjustments as less skim milk is available for feeding calves, hogs, and poultry.

To the extent that milk production can be increased in areas normally delivering to cheese and evaporating plants, less diversion from creameries will be required, goals will be attained more certainly, and the postwar readjustments will be reduced. Therefore, attention should be given to all possible means of increasing production and especially production per cow in such areas.

**R**ECENT input-output research in feeding dairy cows shows that on most farms production per cow can be increased 20 to 25 percent through increased grain feeding. If relative prices of milk and grain are

# MILK PRODUCED ON FARMS IN THE LAKE STATES AND NORTHEAST STATES, 1924-41, AND 1942 PRODUCTION GOALS



favorable, this more intensive feeding will be profitable. However, studies of the responses of dairy farmers to price changes show that habitual rates of grain feeding usually change within rather narrow limits. Only after the lapse of several years can one usually expect adjustment of the magnitude needed now.

Concentrate feed prices in many dairy areas are at times so high as to make additional feeding of doubtful value, if not actually unprofitable. Even with favorable price ratios, farm management records show that in many areas in the Lake States the monetary gain from extra grain feeding may be so small as to furnish little incentive for the additional effort. Some means must be found of getting concentrate feeds into dairy territory in the Lake States and the Northeast on a larger scale than ever before; and at prices that will not only permit profitable feeding but will furnish a special incentive. The present feed-storage plan which the Commodity Credit Corporation is operating on a limited scale in conjunction with farm-

ers' purchasing cooperatives in the Northeast, also should be expanded as an important supplementary aid to obtaining adequate feed supplies.

Sharp price advances in byproduct millfeeds have directed attention to a number of suggestions for utilizing surplus wheat for livestock feed. One is that surplus and low-grade wheat be colored or otherwise marked and released for feeding to livestock at a lower feed price. Another calls for reduced freight rates on feed moving into special emergency feeding areas as has frequently been done in drought emergencies. The reduction in roughage supplies from the persistent drought of the current season in the Northeast may call for such consideration.

Direct cash payments to individual dairymen for increased production have been suggested as the most rapid and economical method of increasing production. Such payments would be tied to actual performance on the part of participating dairymen. A feed-materials program has also been suggested as an alternative to a direct cash-payment plan. This would be

similar to the fertilizer-materials program which has been in operation for several years under the Agricultural Conservation Program. Under such a plan, feed materials would be advanced to participating dairymen as a special inducement for increased production.

**M**ANY internal trade barriers appear as obstacles to the attainment of production goals under the conditions of rapidly expanding production that are called for in the national defense program. Some of these trade barriers have little relation to the legitimate purposes of market regulations such as public health, disease prevention, and highway protection, even in normal times. In the present emergency, especially, trade barriers raise prices to consumers, raise costs to producers, and arbitrarily deny many farmers an opportunity to sell in the most profitable market.

Proposals to attack the trade-barrier problem squarely—and especially the barriers affecting dairy products—rest on strong ground. Now while there is need for all the milk that can be produced, the barriers can probably be removed without loss to anyone. Continued expansion of high-cost, uneconomical production under cover of unnecessary barriers is, moreover, a wasteful and unwise use of labor and resources during this period of national emergency. The removal of trade barriers is desirable from any long-run point of view for the farmer, the dealer, and the consumer. If they are not removed it is likely there will be many high-cost dairy farms—farms badly overexpanded and maladjusted—in northeastern milk sheds after World War II.

**B**RTAIN'S need for dried eggs and the present program for the construction of egg-drying plants in the Middle West call for somewhat greater increases in egg production in the Lake States than in the Northeast. Over a long-time period it is probable

that additional egg production in the Lake States has some transportation advantage over that in the Northeast because of the proximity of lower priced feed. Increases in egg production during the emergency in the Northeast must be planned with an eye to the postwar period if large losses are then to be avoided. Consequently, much of the expansion here should be with existing housing and fixed equipment rather than with the aid of new buildings and equipment.

The expected production of chickens and broilers for meat is likely to be adequate without any further increases, at least according to present indications. Caution may be needed with respect to overexpansion in broiler areas in the Northeast where postwar conditions may not warrant the current scale of production.

**F**RUIT farmers in the Lake States and Northeast have had large production and low returns since the beginning of the 1930's. World War II cut off a large export market for fresh apples, a loss which increased lend-lease shipments of dried and processed fruit are not likely fully to replace. But the prospects for domestic demand for fruits in 1942 are the best in more than a decade. Good care of orchards and efforts to save and preserve as much fruit as possible will be well repaid. Limited processing facilities will, no doubt, need to be supplemented to utilize fully any local area surpluses that may develop.

Many fruit farms in the Northern Dairy Region are not so highly specialized as are western fruit farms. In some areas fruit growers can make an important contribution to the national defense program by expanding dairying, poultry production, or other parts of their farm plant while maintaining efficient fruit production on the land best suited for fruits.

**S**UGGESTED 1942 goals for all truck crops in the Northern Dairy Region are only slightly above 1941.

Many of the trucking areas are near centers of great urban activity and are finding it difficult to obtain farm labor. Vegetable growers are thus faced with an unusual situation which calls for some extraordinary internal farm adjustments. Because of labor shortages, total acreages may in many cases be limited. Upward adjustments in "defense" vegetables will have to be made by reducing less needed and less profitable alternative crops. Special programs that insure adequate returns to growers may have to be developed for some of the processing crops. These should probably include definite assurances well in advance of the planting season in order that growers may be able to adjust limited resources in the right direction. They should also recognize the limits of available canning facilities or market outlets.

**M**OST of the wartime farm adjustments needed in the Northern Dairy Region are in the same direction as long-time desirable changes. The long-time trends in consumption indicate a continuing increase in demand for dairy and poultry products. These, along with fruits and vegetables, are

among the most important "protective foods." In the early post-war years, food demands from Europe are likely to be heavy but it is well to be prepared for at least a temporary weakening of domestic demand as industry readjusts to a peacetime basis. Thereafter, the post-war outlook depends considerably on how freely world trade is permitted to flow. If international business is on a reasonably free basis, producers in the Northern Dairy Region will have larger domestic markets and will feel competition from other areas less keenly than if world trade is organized on a largely self-contained basis.

Against the possibility of a post-war decline in prices, farmers in the Northern Dairy Region would do well to try to maintain a flexible individual farm organization capable of sudden contraction if this should become necessary after the conflict. It would be wiser, for example, to increase milk production now by increased grain feeding per cow than by enlarging barns and keeping more cows. After the war, intensive grain feeding could be quickly reduced without loss of fixed investment.

RONALD L. MIGHELL.

---

## The Corn Belt

**B**ECAUSE a large part of the production of meat, milk, eggs, and soybeans for oil is centered in the Corn Belt, a major part of the additional quantities of most of these products needed for defense must come from that region: Farmers in the Corn Belt are responding and will continue to respond in an effort to produce sufficient food and to take advantage of the opportunities afforded by the Defense Program to raise their incomes. Increased production of some other products is expected also but the changes in farm plans to obtain these increases will be small compared with the changes necessary to raise more

pigs, to milk more cows, to care for more hens, and to grow more soybeans for oil.

The immensity of the production job ahead of Corn Belt farmers is indicated by the 1942 levels of production expected or considered desirable in the five principal Corn Belt States of Ohio, Indiana, Illinois, Iowa, and Missouri. Expected marketings and farm slaughter of hogs from these States are about 9 percent higher (live-weight basis) in 1942 than in 1940, and egg production is about 10 percent above the 1941 level. It is suggested that milk production be increased 10 percent above the 1940 level, or about 5 percent above the level likely to be reached in 1941. Suggested market-

ings and farm slaughter of cattle and calves are 15 percent higher than in 1940 (live-weight basis). The problems involved in achieving this goal, however, are in marketing rather than production, since large numbers of cattle and calves are already on farms. Net live-weight production of sheep and lambs in 1942 is expected to be about 1 percent above 1940.

**T**HE acreage of soybeans grown for grain in the Corn Belt in 1942 will need to be increased above the all-time high acreage grown in 1941 if the goal for soybeans is met. The 1942 acreage suggested for the five principal Corn Belt States is about 600,000 acres, or 12 percent, higher than the acreage grown in 1941.

The increases expected and needed in livestock production in the five Corn Belt States in 1942 are considered possible without an increase in the acreage of feed grains and hay because of large reserves of these feeds. In fact, the suggested acreage of oats for 1942 is lower than the 1941 acreage by about 7 percent, but this suggested decrease in oats acreage is partially compensated for by slight increases suggested in the acreages of barley and grain sorghums.

Wheat acreage in the Corn Belt Region is expected to be lower in 1942 than in 1941. This will release resources that may be used in expanding the production of more urgently needed commodities.

**A**LTHOUGH the production of feed grains, meat animals and dairy and poultry products is common to all parts of the Corn Belt, marked differences in productive resources and in production opportunities exist. The simultaneous production of additional quantities of a number of products, each of which may be a near alternative to the other, means that close attention must be given to the competitive relationships of the products in each area within the region and on different farms so that maladjustments

may be reduced to a minimum. Farmers generally will want to make those adjustments during the defense period which will not too seriously jeopardize their situations during the after-the-war period when desirable long-time adjustments will again come to the foreground.

Farm programs, notably the AAA programs, have brought about a shifting of crops and the performance of additional soil conserving practices, which have resulted in reduction of soil erosion and improvement of soil fertility. In meeting defense needs these recent gains should be conserved insofar as is possible by making full utilization of roughage feeds for livestock production, by expanding acreage of feed grains where the sacrifice in soil conservation will be least and by accompanying any such expansion in acreage with still greater performance of soil-building practices. A considerable expansion in feed production can be accomplished by only a moderate expansion in acreage of feed grains if accompanied by widespread use of approved soil-building practices such as the use of lime, phosphate, and green manure crops.

The programs have also resulted in an accumulation of reserve supplies of feed grains which can be used to increase livestock production rapidly, if properly distributed among farmers. There is considerable elasticity in the use of existing and prospective feed supplies for the production of more hogs by shifting corn from other classes of livestock. Furthermore, feed supplies can be made to go much farther in livestock production by giving more attention to feeding and sanitation practices.

**H**OG production in the principal Corn Belt sections of Ohio and Indiana has been at high levels during the last 3 to 4 years in response to unusually favorable corn yields in 1937, 1938, and 1939 and to price situations that were more advantageous to the feeding of corn to hogs

than to the selling of the crop directly or holding it in storage. Only limited amounts of corn were stored during this period. Because of materially lower yields corn production in 1940 was smaller than in the years immediately preceding. The lower production and limited storage stocks within the area made it difficult for farmers to maintain their pig numbers during the summer of 1941. Since larger supplies of corn are in prospect from the 1941 crop, slight increases in hog production can occur on those farms which found it necessary to curtail production in 1941. In local sections, northern Indiana for instance, current production of corn is low because of prolonged drought during the late summer. Hog production in these sections cannot be increased in 1942, and perhaps not even maintained, unless feeds are brought in from other areas. In the event that additional supplies of feed will be needed before 1942 crops become available, they should be obtained early from nearby surplus areas.

**I**NCREASED quantities of milk and dairy products can be produced profitably in 1942 by heavier grain feeding on most of the well-established dairy farms located in the milksheds of industrial centers of Ohio and Indiana. On farms outside of these milksheds, on which a need exists for more intensive livestock enterprises as a part of a long-time farming program, dairying is well adapted. Cow numbers can be expanded to advantage at this time on these farms if such expansion can be obtained without large new investments.

The expansion in the acreage of soybeans for grain suggested for the eastern Corn Belt in 1942 should occur only on the more level farms. Soybeans contribute to serious soil erosion when planted on rolling land. Careful consideration should be given before planting also to the problem of obtaining machinery for harvesting and threshing the beans after they are grown. If a farmer does not or cannot

own a combine or cannot arrange for the use of one either by hiring a machine or by working out a cooperative arrangement with a neighbor who has a machine, it may be more advantageous for him not to include soybeans in his cropping system. Local agricultural defense boards will assist in arrangements for obtaining machinery where shortages appear likely.

Increased production of chickens and eggs can be expected quite generally throughout the eastern Corn Belt in 1942. Farmers will need to give first consideration to better feeding and better management practices so that more efficient use will be made of the feed that is fed. Moderate expansion in the size of flocks is expected.

**T**HE best alternative use for corn in much of the western Corn Belt during the next year will be as a feed for hogs. Supplies of corn in the area except in the extreme western edge and in west central Illinois and northern Missouri, will be large this year. Since hog production in much of the area is still below the pre-drought level of production, a material increase can be expected in the number of pigs raised.

Where the lack of shelter or equipment on a farm would limit the expansion in pig numbers in 1942 below the level that otherwise would prevail, the possibilities of using some type of temporary facilities should be considered. It would seem unwise at this time to provide permanent shelter and equipment in excess of the amount needed to handle the number of pigs commonly raised before the drought years. Tenant farmers who would like to feed out more hogs than their share of the feed crops will permit should try to keep the landlord's share of these crops on the farm either by purchase or partnership feeding arrangements. In a large number of instances the ability of the tenant to buy the landlord's share will depend upon the availability of credit. If tenant farmers are interested in obtaining larger supplies of locally pro-

duced feed, but are handicapped in doing so by lack of funds, they should consult the agencies furnishing credit for farm production needs.

If stocks of corn in the ever-normal granary are needed in feed deficit areas, the distribution can be facilitated by public action. Some farmers on the western fringe of the Corn Belt and in other local areas will still have insufficient feed after harvesting the 1941 corn crop to expand hog production in 1942 as much as is desired.

**T**HE job of growing the needed increase in the acreage of soybeans for grain falls largely to the central Corn Belt. Larger acreages of soybeans here, as in the eastern Corn Belt, should be grown only on the more fertile and level farms. Farms of this type on which substantial reductions have been made in the acreage of wheat sown this fall and on which soybeans can be substituted for oats grown as a cash crop should be the first to expand their acreages of this crop. Because of the large expansion needed in soybean acreage in 1942 in the central Corn Belt, farmers in the area who plan to plant more than their usual acreage in 1942 should make early provision for ample seed supplies and harvesting machinery.

**I**NCREASED acreages of hay and pasture and continued high prices for cattle of all grades will be favorable to cattle raising in 1942. The long-time position of beef cattle producers is likely to be improved, however, if marketings are increased sufficiently in 1942 to avoid much further increases in numbers on farms. Close culling and early marketing of lower grades of cattle while prices are still high, appears to be a wise policy. Certainly Corn Belt farmers should be cautious about making large outlays for breeding stock at currently high prices. Good foundation herds should be preserved, however, as a means of utilizing pasture and forage crops which are

likely to continue important in Corn Belt farming for some years to come.

Cattle feeders who raise their own cattle and who have ample feed supplies generally can expect good returns for their cattle and feed. The prospects for cattle feeders who buy cattle for feeding are not so good next year because of the narrow margin between the prices of feeder cattle and the prices of slaughter cattle. Hence the contribution of most Corn Belt farmers to the increases in marketings needed to meet the 1942 marketings goal will be largely in cattle marketed without grain feeding.

**T**HE increase in dairying in the western Corn Belt that began during the depression has been discouraged more recently, and will continue to be discouraged, by the improvement in farm incomes. The larger incomes from meat animal production has tended to offset the impetus that larger acreages of hay and pasture might otherwise have given to dairying in the western Corn Belt.

Prospective relationships between the prices of meat animals and the prices of dairy products suggest that most Corn Belt farmers who have dual-purpose herds will have little incentive in the next few years to make substantial shifts from meat production to the production of dairy products. Prospective increases in the wages of farm labor, together with actual shortages of available laborers, will also encourage meat production and discourage dairying on such farms.

There are, of course, many well established dairy farms in the western Corn Belt, and on these it will be desirable and profitable to expand dairying moderately in view of the increasing demand for dairy products. Western and central Corn Belt farmers can increase their production of poultry and eggs by the adoption of better feeding and management practices and by the keeping of larger flocks. In the cash grain areas of Illinois and Iowa the availability of feed supplies and the

need for supplementary farm enterprises offer an excellent opportunity for expanding the family sized flock. The expansion in farm flocks in these areas is evidence that the enterprise can be organized on a profitable basis.

**I**N THE general farming area—southern portions of Ohio, Indiana, Illinois, and Missouri—low-income and small-sized farms are common. In adjusting farming plans to meet defense needs, farmers in this area should give first consideration to the extent to which they are providing their own needs. Efforts to increase production should be centered around the kinds and quantities of farm-grown products needed for providing directly or indirectly the family's food supply. More economical, better balanced and more nutritious diets result from production for home use. In periods of rising prices this is even more true.

Some families, or members of families, may have a chance to move out of the area as opportunities of employment in defense industries and

in commercial agriculture arise. Every effort should be made to encourage people to leave the poorest areas whenever they can improve their opportunities for a livelihood by so doing. The remaining families will have a broader land resource base upon which to build their farming programs.

Some farms in the general farming area will be able to contribute to the defense needs for additional commercial supplies. Another cow or so can be milked on farms where there is an established cattle enterprise to utilize large quantities of pasture and roughage. More pigs can be raised to be sold as feeders to farmers who have access to feed supplies in adjacent localities. Larger flocks of hens can be kept and heavier feeding can be practiced where equipment and feed are available. Increased production of commercial truck crops can occur on some farms.

C. W. CRICKMAN and  
B. R. HURT.

### Prices of Farm Products

[Estimates of average prices received by farmers at local farm markets based on reports to the Agricultural Marketing Service. Average of reports covering the United States weighted according to relative importance of district and States]

Product	5 year average August 1909-July 1914	October average 1910-14	October 1940	Septem- ber 1941	October 1941	Parity price October 1941
Cotton, lb.....cents	12.4	12.1	9.35	17.53	16.55	17.11
Corn, bu.....do	64.2	64.8	59.4	70.8	64.9	88.6
Wheat, bu.....do	88.4	88.1	68.2	95.8	91.0	122.0
Hay, ton.....dollars	11.87	11.49	6.99	7.94	8.34	16.38
Potatoes, <sup>1</sup> bu.....cents	69.7	65.0	52.0	64.4	67.2	96.7
Oats, bu.....do	39.9	38.4	28.3	39.9	38.9	55.1
Peanuts, lb.....do	4.8	4.6	3.26	4.49	4.41	6.62
Rice, bu.....do	81.3	(?)	63.0	89.1	96.7	112.2
Tobacco:						
Flue-cured, types 11-14 lb. <sup>2</sup> .....do	22.9	(?)	19.5	26.2	32.8	25.0
Maryland, type 32, lb. <sup>1</sup> .....do	23.0	(?)	20.0	32.0	32.0	19.5
Apples, bu.....dollars	.96	.72	.72	.85	.87	1.32
Beef cattle, cwt.....do	5.21	5.09	7.78	9.36	9.18	7.19
Hogs, cwt.....do	7.22	7.37	5.83	11.10	10.08	9.96
Chickens, lb.....cents	11.4	11.5	13.3	16.3	16.0	15.7
Eggs, doz.....do	21.5	23.8	23.7	30.3	31.8	37.7
Butterfat, lb.....do	26.3	26.8	28.8	37.2	36.9	36.7
Wool, lb.....do	18.3	18.5	29.9	36.3	36.3	25.3
Veal calves, cwt.....dollars	6.75	6.80	9.11	11.26	11.14	9.32
Lambs, cwt.....do	5.87	5.35	7.64	9.84	9.66	8.10

<sup>1</sup> Post-War base.

<sup>2</sup> 1934-39 base.

<sup>3</sup> Prices not available.

<sup>4</sup> Adjusted for seasonality.

## The West

**M**INIMUM contributions which the 15 Western States can make toward greater supplies of vital foods, call for an increase in the acreage of feed crops of 4 percent, milk production 7 percent, and egg production 14 percent above 1941; beef marketings 19 percent, pork marketings 5 percent, and sheep production 2 percent above 1940; and, because we have a 2-year supply of wheat, they call for a decrease in wheat acreage of 12 percent. These adjustments suggest a net reduction in crop acreage but, except for wheat and commercial corn, they represent only the minimum shifts desired. Meeting these goals offers Western farmers an opportunity to consolidate and increase gains already made in stabilizing their farming and ranching.

Some of the adjustments, begun by many Western farmers during the late 1930's as a result of drought and depression, included: A shift from one-crop farming to more diversified agriculture with increased emphasis on livestock; more feed crops and feed reserves to maintain livestock herds through periods of limited crop and forage production; husbanding of range and soil resources; and a retrenchment in the production of commodities made less profitable by the loss of export markets. These adjustments have been retarded by a lack of capital and unfavorable market conditions, but many of them are those which western agriculture is being asked to make in 1942 as its contribution to the preservation of democracy.

Changes to meet goals should be fitted to the resources and the production alternatives available to different areas and to individual farmers within each area. The ease with which these shifts can be made will depend on the extent of past adjustments, the present use of capital, the accessibility of marketing and processing facilities, and the prevalence of production

alternatives. Wide variations of these factors within the 15 Western States makes it desirable to consider production shifts in terms of broad areas having roughly the same adjustment problems.

**L**ARGE quantities of mechanized wheat equipment will affect farmers' attempts to make the adjustments required in 1942 in the eastern plains. Wheat acreages will be shifted to barley and oats which can be handled with wheat machinery. Corn acreages will be increased to allotment levels. Grain-sorghum acreages may be increased somewhat during the emergency period, although care should be exercised in planting these crops on rolling land in order to prevent excessive erosion. The acreage of flaxseed should remain at the 1941 level, the largest since 1936. More annual pastures, such as rye and sudan grass, can be used effectively in this area, as can an increased acreage of legume hays.

The indicated yields in 1941 of feed crops are unusually high throughout much of this area. The large stocks of feed which are assured, together with the expected shifts in crop acreages, will enable the eastern portion of the Great Plains to attain in 1942 the increase desired in the production and marketings of livestock and livestock products, and at the same time to make vast strides in stabilizing its agriculture.

**I**N 1941, the central portion of the Great Plains seeded less than three-fourths of the wheat acreage seeded for 1937 when there were no acreage allotments; however, further adjustments are needed in this area in order to help meet 1942 goals. Much of the central Great Plains is a high-risk area, yet it continues to seed nearly one-half of the acreage planted to wheat in the United States. The acreage of feed crops has increased somewhat in recent years but much of the 14 million acres of cropland taken out of wheat production since 1937 remains idle.

Feed crops, grass, and livestock production are the only alternative uses for much of this land, yet investments in wheat machinery, a dearth of breeding stock, sporadic yields of feed crops, high land values, the time and expense involved in getting cropland back to grass, and a need for larger farm units—all these have slowed the desired shift to livestock.

Many of these deterrents will be less prominent in 1942. The defense effort will provide profitable markets for livestock and livestock products; the exodus of people from the Great Plains has been greatest in this area and now there is more room for an expansion in the size of operating units; and supplies of feed will be unusually large as a result of exceptional yields of feed crops in 1941. Feed supplies will be more than adequate to attain in 1942 the increase needed in livestock and livestock products, and farmers should take advantage of this opportunity to build up their livestock enterprises. The 1941 crop can provide the feed reserves so essential to a stable livestock enterprise.

**L**IVESTOCK numbers in the Great Plains have increased in recent years from the abnormally low levels of the drought period. Sheep numbers have increased to the highest point in many years. Cattle numbers are still below the predrought level, and present indications are that the number of sows farrowing in 1941 will be little more than one-half the predrought level. Greater pork production in the Great Plains will help meet 1942 goals and will also be beneficial to the area.

In developing or expanding livestock enterprises, farmers should select those enterprises best fitted to their experience and productive resources. However, they should avoid heavy investments in equipment and in high-priced breeding stock, and concentrate on enterprises yielding relatively quick returns. Sheep, hogs, and poultry

are enterprises which can be "grown into" in a relatively short time. High prices of breeding stock may make it dangerous to expand cattle enterprises, but the purchase of a few milk cows of "red-cow" type might be justified since they will yield a quick return in the form of dairy products and will form a nucleus for a permanent beef herd.

All livestock enterprises should be made as flexible as possible to minimize losses during periods of limited feed production or low prices. Indebtedness which has been or must be incurred should be liquidated as rapidly as possible. Soundly organized farms with an optimum of flexibility and a minimum of indebtedness will be in a position to meet any possible contingency and will represent the best contribution of this area to defense.

**T**O carry larger numbers of livestock in the Plains and to provide feed reserves, the acreage of feed crops should be increased if necessary beyond the suggested minimums. Many farmers could utilize annual pastures (wheat, rye, and sudan grass) more effectively in connection with their permanent pastures and while establishing a permanent cover on "go-back" land. If the price of wheat should justify its use as a livestock feed, coarsely ground wheat could replace other grains in livestock rations with no loss in efficiency. Experimental evidence shows that when coarsely ground wheat is mixed with an equal part of ground milo, it is equal to ground milo as a dairy ration; and when mixed with ground corn, two parts of wheat to one part of corn, it is equal to ground corn as a fattening ration for cattle. When the price of 100 pounds of live weight hogs exceeds the price of 10½ bushels of wheat, wheat usually can be fed profitably to hogs. This feeding will help overcome possible feed shortages in the 1942 program of expansion.

**A**DJUSTMENT problems are acute in the Pacific Northwest wheat areas because of a 16-percent reduction required in wheat acreages and a dearth of alternative uses of the acreage to be displaced. Alternatives to wheat are available in western Washington and Oregon and in the eastern irrigated valleys where wheat is grown primarily as a nurse crop, but alternatives are very limited in the drier, major wheat areas of the region where wheat produces more total digestible nutrients per acre than does any other crop. Barley, sweetclover, pasture, and alfalfa hay are possible alternatives in some of the dry-land areas. Dry peas might represent a possible alternative in areas with an annual precipitation of more than 16 inches were it not for the fact that a substantial increase in pea acreage would create a serious problem of pea surpluses.

Should the price of soft white wheat justify its use as a livestock feed, much of the surplus problem would be solved by the feeding of surplus wheat to livestock. Hog, dairy, and poultry enterprises could be expanded materially, as could beef-cattle enterprises on the drier fringes of the areas where grazing lands are available. However, the relationship between current prices of wheat and other feed crops offers little incentive for an increase in the feeding of soft wheat and, should this situation prevail through 1942, the major wheat areas of the Pacific Northwest will encounter difficulties in contributing their share to the increase requested in the production of livestock products.

**A** UNIQUE contribution to the defense effort will be made in the Willamette Valley, where some reduction rather than an increase in feed-crop acreages may be expected. The production of vetch and Austrian winter pea seed in the United States is confined almost entirely to this valley. Great increases in the production of these seeds have been made

in the past 5 years, but increases which have been announced in 1942 prices reflect needs for still greater supplies of these seeds. Expected increases to meet these demands will be at the expense of feed crops which will limit the ability of Willamette Valley farmers to increase their production of livestock and livestock products.

**I**N THE range livestock areas the problem is primarily one of adjusting livestock numbers to the long-time carrying capacity of the range and winter feed supplies. With relatively high prices, prospects for a continued good demand, easy credit, and excellent range conditions there is grave danger of another overexpansion of cattle and sheep numbers—an overexpansion that will endanger both livestock goals and the range.

The number of cattle in the 11 western States on January 1, 1941, was only slightly below the record number in 1934. In Idaho, Nevada, Arizona, and the Pacific Coast States, it was higher than in 1934. The number of sheep was about 2 million smaller than in 1934 but the largest lamb crop in 18 years was raised in 1941 which increased the load on the range. The range has been exceptionally good in 1941, as have feed-crop and hay yields. However, much of the range is stocked to or beyond its carrying capacity and many ranchers are facing the very real danger of forced liquidations should range conditions in 1942 be much below normal. A few individual ranches remain understocked because the operators have been unable to fully replace herds which were liquidated during the drought period.

**A**CLOSER culling of herds will enable western ranchers to attain beef marketings needed in 1942. The sale of old dry fat cows and off-type cows of all ages at the current high prices for slaughter cattle will enable ranchers to (1) meet marketing goals, (2) liquidate much of their outstanding indebtedness, (3) bring herds more

nearly in line with long-time grazing capacities, (4) maintain larger feed reserves, and (5) prepare for a low price cycle by creating young, good type, high production herds which can grow through a period of low prices. Ranchers with suitable ranges can increase the degree of flexibility in their operations by shifting from a cow-calf to a cow-steer type of production. Such a shift would increase immediately the number of breeding cows available in farming areas and at the same time it would permit a greater adjustment of livestock numbers during periods of limited forage production without the losses usually incurred with the forced liquidation of breeding herds.

These practices will put ranchers in a better position to attain any production goals which may be established after 1942, because more beef and mutton can be produced with a moderate rate of stocking. Approximately two-thirds of the range feed required by cattle and sheep is used for maintenance, and, as the rate of stocking is increased beyond the optimum, there is a correspondingly higher percentage of the feed used for maintenance and a smaller amount left for production—calf and lamb crops become smaller, and death losses increase.

**S**HEEPMEN in the West are also in a favorable position to meet goals and improve both their product and their financial position. The prevailing demand among farmers for

old or broken-mouth ewes with which to establish farm flocks, and the current high prices for dry fat ewes for slaughter, place sheepmen in an excellent position. By culling more closely, sheepmen can meet the request for 1942 production, conserve their range and feed supplies, and be in a better position to take advantage of a continued high demand for both mutton and wool.

Western goals for the more intensive crops such as dairy products, poultry, eggs, fruit, and truck crops will be met if too great a labor shortage does not develop. In many areas, feed crop production also threatens to impede production increases. Prospective shortages of both labor and feed should be reported immediately to defense committees.

**F**OR the West as a whole, 1942 goals can be met by adjustments that will also result in a more stabilized agriculture. Recent trends towards increased efficiencies, better farm and ranch units, flexible feed-livestock programs, reduced indebtedness, and similar advantageous situations should be emphasized by the defense program. A continuance of these trends will assure meeting goals in 1942 and beyond, but a reversal of these trends and a continued increase of cattle numbers at the expense of marketings will endanger 1942 goal achievements and be against the best long-time interests of farming and ranching.

H. L. STEWART.

---

## The South

**T**HE immediate adjustment problem of the South arises chiefly because of the reduced market outlets for cotton and tobacco, and for wheat produced in the Southwest. Present supplies of cotton are equivalent to about 2 years' consumption. Prospective market outlets for cotton can be supplied by 22 to 24 million acres;

this makes the remaining cotton land available for the crops and livestock which are urgently needed in the defense effort. Cotton acreage has been reduced since 1920 by more than 10 million acres. An additional 5 million acres have been made available by decreases in numbers of horses and mules—decreases which have been only slightly offset by increases in cattle and sheep.

Nineteen forty-two offers southern agriculture an opportunity to speed up shifts toward more livestock. Markets for dairy and poultry products, for pork, for soybean and peanut oil, and for some fruits and vegetables offer outlets for the products raised on land once in cotton, tobacco, or wheat. In the South are thousands of new and old consumers: Army camps, industrial workers, and—largest of all—the rural and urban populations whose diets have generally lacked enough of the protective foods now needed for defense. Lend-lease and stockpile needs add to the demand for southern farm products.

**P**OPULATION pressure on land in the South is being reduced by the defense emergency. This pressure always has tended to compel people to grow cotton or tobacco—crops yielding the highest returns from the limited amount of cropland available to southern farm people. Although cotton is still the best cash crop, the South will benefit by an agriculture that has a more diversified income base. The food production goals now set are really short of the quantities needed for adequate southern living: the 1942 goal for milk production is 7 percent above production in 1941 in the Southern States, whereas recent estimates suggest as a desirable long-time adjustment an increase of 50 percent. If the farm and urban people of the South were to have only a minimum of the foods regarded as “adequate” by home economists, southern farmers would need to put 13 million more acres in food and feed crops and 23 million more acres in pasture.

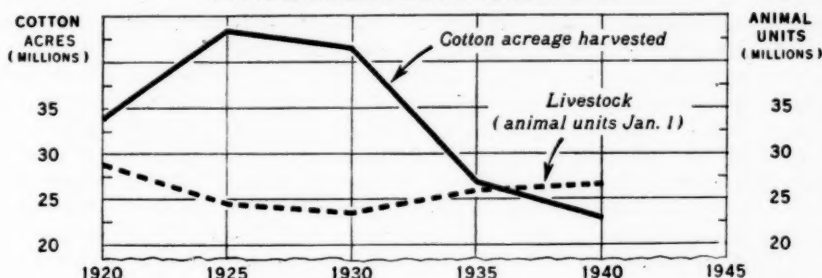
Many obstacles stand in the way of achieving these long-time objectives—obstacles that include a lack of skills, equipment, and materials, and physical limitations of the land itself. But in 1942, a start can be made toward these objectives, if the South begins now to remove or circumvent whatever may impede its progress toward defense

Tentative or suggested 1942 goals or expected production for the major southern agricultural products vital to the Nation's defense efforts have been announced by the United States Department of Agriculture. To reach these goals, milk production will need to be increased by 7 percent over the 1941 level in the 13 Southern States, egg production 12 percent, chickens for meat 14 percent, and the number of milk cows by 3 percent. Cattle and sheep for slaughter should be increased about 15 percent over 1940. Hog marketing is not expected to increase over 1940, owing to the relatively small 1941 pig crop in Southern States. However, a 16-percent increase over this year is anticipated in the spring pig crop of 1942.

Increased acreages of feed crops will be needed. The goals suggest increases of nearly one-fourth in the acreage of oats and barley, 5 percent in hay, and 2 percent in corn. Reduced foreign market outlets for cotton and tobacco will limit the acreage of these cash crops, but acreages of two other crops—peanuts and soybeans for oil—are expected to expand greatly. The 1942 goal on peanuts for oil is 1.9 million acres, while the soybean goal is over 1 million acres. A 4-percent increase in truck crops is suggested.

food goals and a long-time stability in agriculture. Production conditions vary widely in the South, and adjustments in agriculture to meet the new demands present different problems in different areas. In some areas, changes in farming over a period of time have already progressed far towards a realization of a diversified farming program. In others, the one-cash-crop system still predominates, and adjustments may have to be more far-reaching. These differences in conditions and in the nature of adjustments needed during this coming year may be illustrated in terms of the situations in four distinct type-of-farming areas in the South.

# COTTON ACREAGE AND LIVESTOCK NUMBERS\*, 13 SOUTHERN STATES, QUINQUENNALLY, 1920-40



DATA FROM A. M. S.

\* ANIMAL UNIT WEIGHTS: MILK COWS, 1.0; OTHER CATTLE, .6; HOGS AND PIGS, .29; HORSES AND MULES, 1.0; AND SHEEP, 14

**T**HE Black Belt of Alabama is typical of areas shifting away from almost complete reliance upon cotton toward livestock. This area is naturally suited to a type of farming involving the use of pastures. Legumes and small grains do well and a good stand of pasture grasses, unusual in the South, is easy to obtain. However, the changes in farming now taking place require less farm labor and are creating an acute problem of population displacement.

The training of farm workers for other employment should be undertaken immediately in this area. The large number of farm people in the young age groups represents a valuable potential source of skilled labor for industrial employment in defense industries. Besides vocational training, the setting up immediately of informational and placement services is needed so that young people may be apprised of conditions in other areas and other lines of employment. Adjustments made now should be safeguarded against any return of "surplus labor" to farm occupations. In 1942, a shift from intensive crops to more extensive production of livestock in this area would be facilitated by a reduction in farm population.

The importance of winter pastures and adequate feed and roughage supplies has been stressed in recent months. But a shortage of winter legume seed, unfavorable weather, lack of haying equipment, and lack

of storage space have prevented many farmers in the Black Belt from making adequate preparations. Farmers should be encouraged to utilize the available winter pasture fully. It has been suggested also that partial conservation payments be allowed for feed crops, such as winter wheat or oats, even though these crops are pastured off or used for hay.

**I**N making plans for next spring's plantings, Black Belt farmers should be encouraged to capitalize on the favorable prices for livestock and livestock products by increasing their planting of summer hay and pasture crops. However, equipment and storage space are needed to get the most from old and new acreages of these crops. Expansion in cooperative ownership of equipment, such as mowers, rakes, and balers, for use by several farmers will be needed in this and other areas.

The production of large quantities of small grains, hay, and pasture crops are relatively new undertakings to many of these farmers. Individual farm plans will facilitate the wise use of these crops. Demonstration projects might provide a partial answer to the problems that will inevitably arise during the adjustment period.

An attempt is now being made by the FSA to demonstrate how private landowners in the Black Belt might utilize their holdings for a greater net income and provide employment for a

large number of families. Large acreages of land are being leased for cooperatives so that displaced families may be given an opportunity to rehabilitate themselves. Each family is expected to handle about 10 milk cows and to grow the necessary grain and other feed for these animals. The practicality of such a program has been demonstrated to some degree by the development of dairying on similar soil areas in Mississippi.

**T**HE Cotton-Peanut Section of Georgia and Alabama is another area in which the income from cotton is being substantially supplemented with income from other enterprises. The light sandy soils here are well adapted to the growing of peanuts and truck crops. Peanuts are grown for edible nuts, for oil, and for use as hog feed. Prices of peanuts for oil now compare favorably with prices of edible nuts. A greatly expanded acreage of oil nuts is needed and expected at present prices, but care must be taken to provide for soil maintenance by proper rotations.

Special credit facilities likely will be needed for the purchase of harvesting equipment for these crops. But because of the large investment by individual farmers and the shortage of machinery, cooperative purchases of machinery would seem desirable. Care should also be taken to see that adequate seed supplies of adapted varieties of oil nuts are available.

A large part of the peanut acreage in the past has been used for hog pasture. In view of the urgent defense needs for oil nuts, attention should be given the possibilities of increasing pork production without increasing the acreage of peanuts used for hog pasture. Sows farrow the year around and most of the pigs are "carried through" to peanuts each year. By breeding in late November or December for late spring litters, the amount of summer feeding could be reduced, yet the pigs would be in

better condition when turned into peanuts.

Hog losses in the peanut-producing sections of the South were very great in 1940. Hog losses could be reduced materially by the adoption of a program for 100-percent vaccination. However, disease prevention, or control when outbreaks occur, is especially difficult for all classes of livestock. Veterinary fees are often beyond the payment ability of the small farmer. The peanut-hog area and many other areas of the South would benefit by wide development of veterinary service cooperatives that would combine vaccination work for hog cholera and other diseases, bull ring service using artificial insemination techniques, and milk testing for butterfat production. Such a program would not stop with animal doctoring; it would include work and instruction on livestock sanitation which indirectly would improve public health. Peanuts are grown to some extent throughout the Coastal Plains Region, but in many areas they are not a common commercial enterprise.

**I**N the Longleaf Pine cut-over area of Mississippi and Louisiana (another Coastal Plains area), the development of supplemental enterprises has been in the direction of dairying and in some localities truck crops. One of the "bottlenecks" in the production of needed dairy products in this area is the inadequate method of marketing. In many sections, considerable milk-processing plant capacity is unused, while in other nearby sections good milk remains unsold. To save this milk in 1942, some method should be developed so that producers of small quantities of milk could send milk to small cooling plants and concentration points for distribution to processing plants.

Adequate production of needed feed supplies is difficult, but even where production itself is adequate, the lack of haying equipment and storage space

limits the use of roughage. The use of trench or box silos would ease the storage problem on many farms, particularly in the more humid sections where it is difficult to cure hay. Silos of this type are also good defense period improvements since they require a minimum of material. Loans based on actual needs and repaid as rapidly as possible during the period of high prices could be provided at low interest rates for the purchase of such materials.

The shortage of dairy cows and livestock presents a problem of major proportions all over the South. During recent months, many large dairy farms near southern cities and defense centers have scoured the countryside for cows and heifers. At the same time, other dairies have been killing day-old calves or selling them as vealers. In view of the need for increased livestock production in the South, it has been suggested that FSA supervisors, county agents, or local groups establish a standard purchase price—at least for heifer calves—and distribute these calves at the purchase price to farmers having available pasture or feed.

An expansion in truck-crop acreage is needed in some parts of the cut-over pine areas to meet the increased military and civilian demands. An organized pick-up service, working from central points with concentration facilities, may be worthy of consideration even though some public assistance is required. Once established, marketing services of this sort would prove of permanent value in many communities, for without improved marketing systems, many producers can never change their system of farming.

**T**HE Yazoo Delta of Mississippi is an area that has had certain advantages in cotton production. Yields have been good and the level topography has encouraged the increased use of machinery. The trend in cot-

ton production in this area has been upward for more than 60 years. Supplemental commercial enterprises have been slow in developing. Recently the production of oats and soybeans for oil has been expanding.

Greatly increased acreages of soybeans for oil are needed in this area in 1942, and this will provide a profitable supplementary enterprise on many farms in the Mississippi Delta where yields of 20 to 30 bushels are not uncommon. With such yields and present prices, soybeans for oil compare favorably with oats as an alternative enterprise and are more profitable than corn or hay. These advantages should be pointed out to farmers and the crops fitted into 1942 plans.

**P**ROSPECTIVE shortages in the seeds for adapted varieties of soybeans for oil and recent shortages in winter legume seeds raise the whole question of "war period" seed supplies for minor crops. Little or no effective attempts were made early this summer to conserve a larger-than-ordinary supply of seed. It is doubtful that private seed companies or farmers can increase seed stocks in sufficient quantities to provide an adequate safety margin for 1942. Extremely careful handling of present seed stocks will minimize over-the-winter losses. In safeguarding next year's supply, consideration should be given to agreements with seed firms for a 35 to 50 percent seed reserve. This might be done by an agreement to remove unsold volumes at a fixed price.

The use of nonresident labor for cotton picking has increased in the Delta in recent years as farmers increased the use of tractors and larger machinery. Farm labor shortages should be watched carefully in some parts of the area and offset by community action where crop losses are threatened.

KENNETH L. BACHMAN.

## Credit Outlook for 1942

**R**ISING costs of things that farmers buy and expanded production for the Food-for-Freedom Program will require the use of more short-term credit by farmers in 1942. As in other recent years, ample supplies of loanable funds are available through commercial banks and production credit associations.

Unless legislative changes are made in required reserve requirements of member banks, it is probable that there will be little change in interest rates on agricultural loans during the coming year. Even after the recent raise in reserve requirements, member banks of the Federal Reserve System have about 4 billions of dollars of excess reserves, or almost 45 percent in excess of their statutory reserve requirements.

Farmers may be expected to increase their use of production credit during 1942. There was an expansion of about 10 percent in the credit of this type supplied to farmers by commercial banks and production credit associations from July 1, 1940, to June 30, 1941. Personal and collateral loans of commercial banks, excluding loans guaranteed by the Commodity Credit Corporation, increased from about \$956,000,000 to about \$1,057,000,000 and the loans of production credit associations rose from \$200,000,000 to \$221,000,000. Further increases will be needed as production moves toward defense goals, since agricultural costs are advancing and farmers will require more seed, feed, fertilizer, machinery, and livestock.

**T**HE increase in production credit supplied to farmers by commercial banks and production credit associations during the last year was not a sudden growth resulting from the defense program but a continuation of a trend that has been in effect for several years. This trend appears to have resulted primarily from increased use of farm machinery, larger numbers of

livestock on farms, expansion of agricultural production, and refinancing by banks and production credit associations of credits formerly supplied from other sources. In order to reach the defense production goals established for 1942, it is likely that many farmers will have to increase still further the amount of credit used in their operations.

Under the new 85 percent of parity program, loans made or guaranteed by the Commodity Credit Corporation seem likely to increase during the next year, particularly on wheat and cotton. Such loans have been used by many farmers to finance production, just as income would have been used if the crops had been sold. The upward trend of farm income and the probable increase of commodity loans during the next year will be of great assistance to farmers in meeting living expenses and enlarging the production of products needed for defense.

The outstanding total of emergency and rehabilitation credits, advanced by the Farm Credit Administration and the Farm Security Administration has been rising during the last 2 years at a rate of about \$40,000,000 per year. With improving farm income and greater opportunity for farmers to find nonfarm employment, it seems probable that the need of many farmers for emergency relief and rehabilitation measures will be reduced during the next year. Available funds, however, never have been adequate to meet all emergency and rehabilitation needs. A decline in the aggregate need for emergency and rehabilitation measures probably would result, not in a reduction of emergency and rehabilitation loans but in an extension of service to many who otherwise could not be financed.

**T**HE long period of declining farm-mortgage debt seems to be approaching an end, but any increase that may occur in 1942 is likely to be

small. The volume of farm mortgages recorded in the first half of 1941 was 8 percent above the same period in 1940. This upward trend appears likely to continue in 1942. Voluntary transfers of farms, which frequently involve use of mortgage credit, are at the highest level in many years. Also, involuntary transfers, which usually liquidate debt, are at the lowest level in many years. Continued low interest rates and ample funds for mortgage financing will facilitate borrowing on mortgage credit to purchase farms or to obtain funds to expand production.

Improved farm income will be reflected, however, in some increase in principal repayments. Also, to the extent that farms already heavily mortgaged are bought by investors in increasing numbers for cash, there is present an additional factor tending to reduce mortgage debt. The several factors operating to reduce mortgage debt may offset, for a time, those operating to increase it. The largest increases of mortgage debt in the period of the first World War came after the close of the war, and a very large increase occurred in 1920 when, in addition to the large volume of voluntary farm transfers completed, many farmers gave real estate security for loans previously obtained on personal or collateral security.

The trend of outstanding mortgage debt in 1942 is likely to be materially influenced by the attitudes adopted by farmers, other prospective farm purchasers, and lenders toward the actual and prospective increase in farm income as a basis for long-term credit. Many farmers with the experience of the last depression fresh in mind, and with the experiences following the post-1929 collapse not entirely forgotten, will be slow to make commitments involving heavy mortgage payments in the uncertain future. Lenders likewise will remember their mortgage loan difficulties in these periods. It seems probable that many of the mortgage loans negotiated in

the next year will contain provisions for rapid amortization during the period of increased farm income so that loans can be carried if necessary with substantially reduced farm income.

Index Numbers of Wholesale and Retail Prices of Foods and Prices Received by Farmers for 58 Foods, Annual 1910-40, by Months, January-September 1941<sup>1</sup>

Period	Whole-sale prices of all foods <sup>2</sup> (1910-14=100)	Retail prices of all foods <sup>3</sup> (1910-14=100)	Farm prices of all foods <sup>4</sup> (1913-14=100)	Farm-er's share of con-sum-er's dollar
				Percent
1910.....	100.6	95.9		
1911.....	96.1	94.8		
1912.....	103.6	100.6		
1913.....	99.5	103.1	99	53
1914.....	100.3	105.6	101	53
1915.....	101.4	104.4	99	52
1916.....	117.4	117.2	115	54
1917.....	162.0	150.9	164	60
1918.....	184.7	173.5	181	58
1919.....	200.8	191.6	197	57
1920.....	213.0	209.7	201	53
1921.....	140.5	158.0	133	44
1922.....	135.8	146.0	125	45
1923.....	143.7	160.0	128	45
1924.....	141.1	158.5	125	45
1925.....	155.3	171.5	146	48
1926.....	155.0	177.3	149	48
1927.....	149.9	170.7	140	47
1928.....	156.6	168.8	143	48
1929.....	154.9	171.0	145	47
1930.....	140.3	162.6	127	44
1931.....	115.7	134.1	90	38
1932.....	94.6	111.6	66	33
1933.....	93.8	108.5	69	35
1934.....	109.3	120.9	79	37
1935.....	129.8	129.5	101	42
1936.....	127.3	130.7	112	44
1937.....	132.6	135.9	118	45
1938.....	114.1	126.2	96	40
1939.....	109.1	122.8	93	41
1940.....	110.5	124.6	99	42
1941:				
Jan.....	114.3	126.2	106	45
Feb.....	114.0	126.3	103	44
Mar.....	116.6	127.0	104	44
Apr.....	120.8	129.8	112	46
May.....	123.3	131.7	113	46
June.....	128.8	136.6	119	47
July.....	131.3	137.7	125	49
Aug.....	135.2	139.4	128	50
Sept.....	138.8	143.0	134	51

<sup>1</sup> These indexes are not strictly comparable but correctly represent trends.

<sup>2</sup> Bureau of Labor Statistics index of wholesale prices of foods converted to 1910-14 base. Includes some items not produced on farms in United States and does not include some important food products of the farm.

<sup>3</sup> Bureau of Labor Statistics index of retail costs of foods in 51 cities combined converted to 1910-14 base; unrevised series used 1910-22, revised series beginning 1923. Includes foods not originating on farms of the United States.

<sup>4</sup> Index of estimated equivalent farm value of quantities of 58 foods purchased annually by a typical American workingman's family converted to 1913-14 base.

## Egg-Drying Industry Expands

THE egg-drying industry of the United States is undergoing a spectacular expansion. In recent months production facilities and capacity have more than trebled. Since last spring, the number of plants equipped to dry eggs has increased from 16 to around 60. Production capacity, on the basis of a 20-22 hour day and 300 days' operation, has jumped from 50 million pounds to around 170 million pounds of dried product.

Reason for this sharp expansion is the war. Unprecedented quantities of dried eggs are needed in the present emergency. The requirement of dried eggs for lend-lease shipment abroad is by far the biggest factor in the demand for this product. Dried egg production capacity of 170 million pounds is believed to be more than ample to provide for normal domestic needs, supply maximum quantities for lend-lease shipment to Great Britain, and furnish stockpile supplies for use in the future. (A 30-dozen case of eggs yields about 10 pounds of dried product.)

To facilitate expansion in the dried-egg industry, needed immediately to meet Lend-Lease requirements, arrangements were made by the Federal Government to give priority to plant equipment and supplies. Some of the expansion that has taken place resulted from the conversion of skim-milk drying equipment during late summer when milk supplies available for drying declined seasonally. This type of expansion may be temporary.

Until recently, the egg-drying industry was located primarily in the Southwest, including Texas, Oklahoma, and Missouri. Now the industry has expanded into Corn Belt and other surplus-egg-producing areas. Among the States where the biggest growth has taken place are Indiana, Ohio, Iowa, Minnesota, Missouri, Kansas, Nebraska, South Dakota,

Wisconsin, and Tennessee. Some expansion has taken place in Pacific Coast States, while new plants have been opened in the Atlantic Coast States of New York and New Jersey.

THE dried-egg industry in the United States traces back to the latter half of the 1800's when the drying process was invented and small-scale production was begun. In the years around 1900, the industry made more rapid advances until about a half dozen plants were operating in the Middle West. Some dried eggs were shipped to Alaska and even to China for use by the United States Army stationed in that country. While the industry was being expanded, it ran into some difficulties with State and Federal regulatory bodies. In a number of instances the quality of the product was found to be poor and unfit for human consumption.

Disintegration of the industry began in the latter part of 1915. Egg prices, along with other prices, were being moved up sharply by war conditions. This, plus the difficulties encountered with governmental regulatory bodies, forced a large part of the dried-egg industry out of the United States. An additional factor was the opening of the Panama Canal, which made it possible for China to export dried eggs to this country's Atlantic seaboard with low shipping costs.

American firms erected dried-egg factories in China. Previously, the industry in China had been developed to some extent by German engineers who had built drying equipment. The decline and near extinction of the industry in the United States was reflected in a sharp increase in imports of dried eggs from China. During the 1915-17 period, imports approximated 6,000,000 pounds a year. In the 1917-20 period, the average jumped to 10,000,000 pounds annually, and

to about 24,000,000 pounds a year for the 1920-22 period. In September 1922, the tariff on dried egg imports was increased from 10 cents per pound to 18 cents. A decline in imports from China followed, at least in part as a result of this change.

**O**UTBREAK of civil war conditions in China in 1927 sharply reduced the volume of dried eggs coming into the United States and resulted in a revival of the industry in this country. By 1929 five plants had been opened, but production was small until lower egg prices and a further increase in the tariff brought about a more favorable competitive situation for the domestic dried egg industry. Imports averaged over 10,000,000 pounds during 1929, 1930, and 1931, but imports dropped sharply after the tariff was increased from 18 to 27 cents per pound in July 1931. The industry continued to expand during the depression years. Low egg prices made it possible for domestic driers to compete on a more equal cost basis with the product from China. Imports continued relatively small, averaging around 2,500,000 pounds annually from 1932 through 1934 with domestic production averaging slightly more than 3,600,000 pounds.

After reaching a peak in production in 1933 and 1934, expansion of the domestic dried-egg industry began to slow down in 1935 because of rising egg prices. Imports began to increase and for the year exceeded 6,400,000 pounds, while domestic production totaled 3,000,000 pounds. During 1936, there were in the United States 15 egg-drying plants in active operation or which could be placed in operation on short notice. The capacity of the equipment available was sufficient to produce all of the dried eggs normally being consumed in this country.

**I**N 1937, the last normal year before invasion of China by the Japanese, the United States imported from China more than 8,800,000 pounds of dried

eggs. The invasion seriously disrupted China's production and trading activities and exports of dried eggs to the United States declined sharply. In 1938, the total was slightly in excess of 1,200,000 pounds and has continued low since that year.

At the same time, domestic production of dried eggs has been increasing. A record was reached in 1939 when a little more than 10,000,000 pounds were produced. Production in 1940 was the second largest, with nearly 7,500,000 pounds. Since then the trend in domestic dried-egg production has been upward because of the strong domestic demand and the need for large supplies for lend-lease shipment to Great Britain.

The greatly expanded capacity that now can produce on a full time basis around 170 million pounds of dried egg products is believed to be more than is needed to meet the greatly increased export and domestic requirements. After the emergency need for dried eggs is over, production will undoubtedly be slowed down. Instead of operating on an around-the-clock basis, plants could return to the usual 8 hours per day, and operate only during the 4 peak months of egg production instead of the full year as they now find necessary.

**P**EACETIME production of dried eggs in the United States may be at a higher level in the future than in the past. There is a strong possibility that the use of dried eggs in the home may become more popular. A great deal of experimental work is being done by Governmental and private agencies to lower production costs and develop home uses. At least one large food concern has been experimenting with the sale of dried eggs in small consumer packages. Until the domestic market for dried eggs is broadened, most of the product will doubtless continue to be used in this country by bakers and other food manufacturers.

NATHAN KOENIG.

# Economic Trends Affecting Agriculture

Year and month	Industrial production (1925-39=100) <sup>1</sup>	Income of industrial workers (1921-29=100) <sup>2</sup>	Cost of living (1924-29=100) <sup>3</sup>	Wholesale prices of all commodities <sup>4</sup>	1910-14=100			Farm wages	Taxes <sup>6</sup>
					Prices paid by farmers for commodities used in <sup>5</sup> —				
					Living	Pro-duction	Living and production		
1925	90	98	101	151	164	147	157	176	270
1926	96	102	102	146	162	146	155	179	271
1927	95	100	100	139	159	145	153	179	277
1928	99	100	99	141	160	148	155	179	277
1929	110	107	99	139	158	147	153	180	281
1930	91	88	96	126	148	140	145	167	277
1931	75	67	88	107	126	122	124	130	253
1932	58	46	79	95	108	107	107	96	219
1933	69	48	75	96	109	108	109	85	187
1934	75	61	77	109	122	125	123	95	178
1935	87	69	79	117	124	126	125	103	180
1936	103	80	80	118	122	126	124	111	182
1937	113	94	83	126	128	135	130	126	187
1938	89	73	81	115	122	124	122	125	186
1939	108	84	80	113	120	122	121	123	190
1940	123	95	81	115	121	124	123	126	190
1940—October	130	101	81	115			122	129	
November	134	104	81	116			122		
December	139	108	81	117	122	125	123		
1941—January	140	111	81	118			123	124	
February	144	111	81	118			123		
March	147	113	82	119	124	125	124		
April	144	113	82	121			124	138	
May	154	125	83	124			125		
June	159	133	84	127	129	128	128		
July	160	138	85	130			129	160	
August	160	138	86	132			131		
September <sup>7</sup>	160		87	134			133		
October <sup>7</sup>				134			136	165	

Year and month	Index of prices received by farmers (August 1909-July 1914=100)								Ratio of prices received to prices paid
	Grains	Cotton and cotton-seed	Fruits	Truck crops	Meat animals	Dairy products	Chick-ens and eggs	All groups	
1925	157	177	172	153	140	153	163	156	99
1926	131	122	128	143	117	152	159	145	94
1927	128	128	144	121	140	155	144	139	91
1928	130	152	176	159	151	158	153	149	96
1929	129	144	141	149	156	157	162	146	95
1930	100	102	162	140	133	137	129	126	87
1931	63	63	98	117	92	108	100	87	70
1932	44	47	82	102	63	83	82	65	61
1933	62	64	74	105	60	82	75	70	64
1934	93	99	100	103	68	95	89	90	73
1935	103	101	91	125	118	108	117	108	86
1936	108	100	100	111	121	119	115	114	92
1937	126	95	122	123	132	124	111	121	93
1938	74	70	73	101	114	109	108	95	78
1939	72	73	77	105	110	104	94	93	77
1940	85	81	79	114	108	113	96	98	80
1940—October	80	78	79	99	112	116	112	99	81
November	83	79	71	98	112	121	120	99	81
December	81	79	75	93	111	128	122	101	82
1941—January	84	80	78	117	130	121	100	104	85
February	81	80	80	156	130	118	90	103	84
March	84	82	83	134	129	118	90	103	83
April	90	88	89	161	137	121	104	110	89
May	93	98	89	146	138	124	107	112	90
June	96	107	97	146	144	126	118	118	92
July	98	121	93	130	154	132	127	125	97
August	99	128	100	133	158	135	130	131	100
September	106	150	89	145	166	140	141	139	105
October	101	144	107	164	157	145	146	139	102

<sup>1</sup> Federal Reserve Board, adjusted for seasonal variation. Revised September 1941.

<sup>2</sup> Adjusted for seasonal variation. Revised April 1941.

<sup>3</sup> Monthly indexes for months not reported by the Bureau of Labor Statistics are interpolated by use of the National Industrial Conference Board cost-of-living reports.

<sup>4</sup> Bureau of Labor Statistics index with 1926=100, divided by its 1910-14 average of 68.5.

<sup>5</sup> These indexes are based on retail prices paid by farmers for commodities used in living and production reported quarterly for March, June, September, and December. The indexes for other months are interpolations between the successive quarterly indexes.

<sup>6</sup> Index of farm real estate taxes per acre. Base period represents taxes levied in the calendar years 1909-13, payable mostly within the period Aug. 1, 1909-July 31, 1914.

<sup>7</sup> Preliminary.

NOTE.—The index numbers of industrial production and of industrial workers' income shown above are not comparable in several respects. The base periods are different. The production index includes only mining and manufacturing; the income index also includes transportation. The production index is based on volume only, whereas the income index is affected by wage rates as well as by time worked. There is usually a time lag between changes in volume of production and workers' income, since output can be increased or decreased to some extent without much change in the number of workers.